

TITLE OF GROUP CLASSES: ENGINEERING TECHNICIAN III

TITLE OF CLASSES IN GROUP:

Class Code:

CONSTRUCTION & MAINTENANCE	02770801
MATERIALS	02770802
SURVEY IN TRAINING	02770803
ADMINISTRATIVE SERVICES	02770804
NATURAL RESOURCES	02770805
CONSTRUCTION RECORDS	02770806

Pay Grade: 23A

EO Code: C

CLASS DEFINITION

GENERAL STATEMENT OF DUTIES: Under supervision, to perform moderately complex engineering work in the area of specialization indicated by the title of the class of position; and, to do related work as required.

SUPERVISION RECEIVED: Works under the immediate of a civil engineer or engineering technician of higher rank, involving the exercise of some judgement in the application of the basic principles of engineering; work is reviewed in process and upon completion for results obtained.

SUPERVISION EXERCISED: Supervises the work of engineering technicians and/or other personnel assigned to assist.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

Under supervision, in the area of specialization indicated in the title of the class of position:

Construction and Maintenance:

On a public works construction or highway maintenance assignment, to assist in the inspection of all materials and workmanship going into the project; to furnish contractors with all lines, grades and elevations; to make weekly estimates of work accomplished; to submit reports as to progress of work and manner of performance; to submit final estimates for contract items; to assist in the inspection of the workmanship and practices of the contractors and/or state crews engaged in highway construction or maintenance projects; to supervise materials tests while work on projects is in process; to check the work of contractors or crews against plans specifications and to report immediately, findings contrary to such plans and specifications; and to supervise work of crews assigned to maintain highways; or to act as resident engineer on simple to moderately complex construction projects.

Materials:

To assist a civil engineer in exercising supervision over highway materials testing activities; to assist in locating and sampling test pits selected for materials survey; to take and test samples of aggregates, mixes, asphalt, steel and other materials used in highway or bridge construction; to prescribe asphalt and concrete mixes, when required; to prepare materials survey reports; to assist in the review of work by inspectors stationed at materials plants and construction projects; and to assist in materials research.

Surveyor-In-Training (S.I.T):

As a surveyor-in-training, to assist in the coordination and supervision of work of a field survey party performing all types of civil engineering surveys for the location, construction and reconstruction of state highways and bridges; and to perform complex technical survey work.

Administrative Services:

To assist in supervising the preparation of contracts and specifications for preliminary engineering, construction, reconstruction and maintenance of state highways and bridges; to assure compliance with all federal and state regulations; to monitor all preliminary engineering contracts, and to assist in the instruction of personnel in construction procedures; to prepare quantity computations and cost estimates for all contracts, and to assist in the updating of the Secondary Road Plan; to review and verify final quantities used in various construction projects in the transportation area, ensuring that all work accomplished is in conformance with state specifications and federal requirements.

Natural Resources:

To perform simple and routine engineering functions and to assist in the planning and supervision of technical engineering work related to the development, construction and maintenance of state parks, recreation areas, structures and grounds as part of the Green Acres Program; to assist a professional engineer, or an engineering technician of a higher classification, in planning and constructing of roads, water systems, building and related structures; to assist in the conduct of surveys and in the preparation of surveys and in the preparation of topographical maps and wetlands project evaluations.

Construction Records:

To provide technical computer support and perform record keeping tasks within the state's road and bridge construction program; to install the state's road and bridge construction program; to install appropriate personal computer software applications for new construction projects and render assistance in the resolution of any record keeping problems as they relate to individual projects; to provide computer orientation and training to new employees, and update existing employees on revisions and/or the implementation of new procedures and practices; to monitor problems and recommend program revisions to correct those problems that too frequently occur; to utilize standardized computer software applications in order to set up, input and maintain all recordkeeping documentation for bridge and/or road construction projects; to ensure that computerized records are maintained consistent with the Procedures of Uniform Record Keeping (PURK); to enter into a personal computer daily item slips and back-up for work performed by contractors; to consolidate vital specific project data, and prepare reports thereon related to item ledger sheets, other project worksheets, materials reports, and time sheets for projects; to enter via use of a personal computer the specific data as it relates to the appropriate category; to assist in the preparation of and to enter Reports of Change, contract agenda, bi-weekly progress payments, correspondence, updates, and other information related to the project; to maintain accountability of all phases of construction activity through the utilization of a computerized record keeping system; to utilize established practices and procedures resulting in the finalization of the record keeping process for the project, upon project completion.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A working knowledge of and the ability to apply the basic principles of civil engineering applicable to the area of specialization indicated in the title of the class of position; as a surveyor-in-training, must possess a S.I.T. certificate from the R.I. Board of Registration for Land Surveyors; a working knowledge of the kinds of basic materials, elements or products of the area of specialization indicated in the title of the class of position; a working knowledge of, and the ability to apply the basic principles of the system of measurements applicable to the area of specialization indicated in the title of the class of position; a working knowledge of the equipment, (to include on-line data terminals), instruments, techniques and procedures applicable to the area of specialization indicated in the title of the class of position; a working knowledge of the procedures, rules,

guidelines and standards in the area of specialization indicated in the title of the class of position; the ability to read and interpret technical specifications and engineering plans, maps and drawings; the ability to supervise the work of engineering technicians and others engaged in either design and/or construction or maintenance, or materials testing; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: completion of a technical institute curriculum accredited by the Engineer's Council for Professional Development, or completion of two years of study in an accredited college including the successful completion of courses in algebra, geometry, trigonometry, and highway and/or structural drafting; and

Experience: Such as may have been gained through: employment as an engineering technician in a public agency or in private industry which has provided some experience in an area of specialization indicated in the title of the class of position.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

Class revised: July 4, 1999

Editorial Review: 3/15/03